



2021 Legislative Session

Division of Water Rights

NRAEQ Appropriations Subcommittee

Teresa Wilhelmsen, P.E.

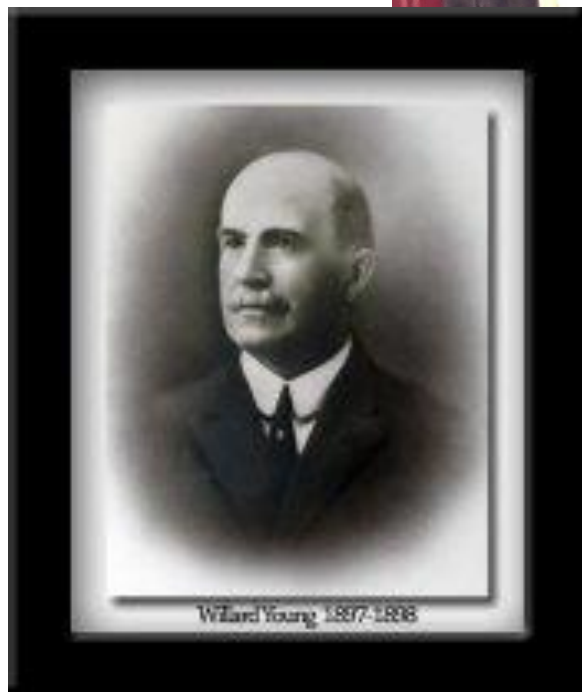
State Engineer / Division Director

January 27, 2021

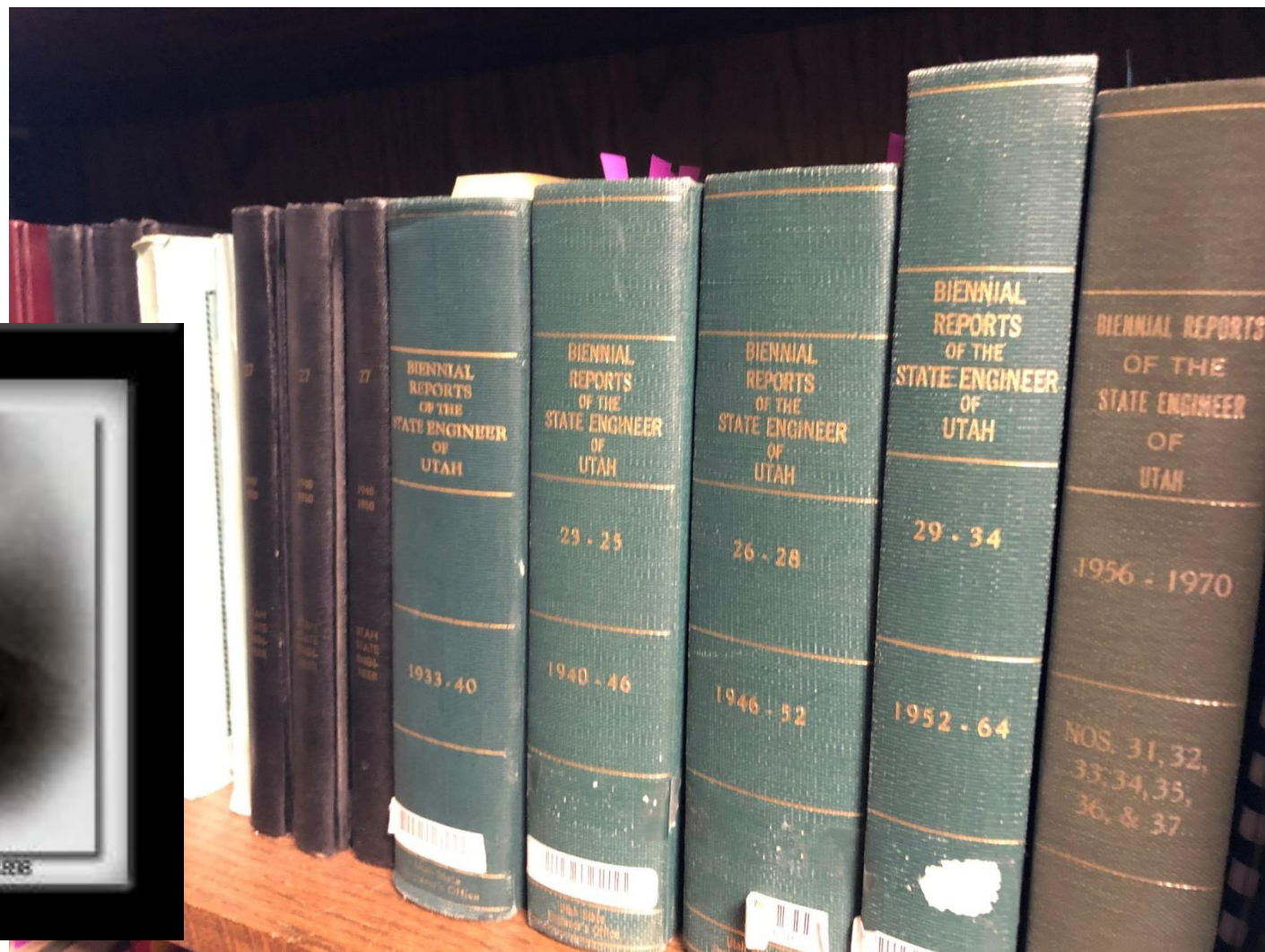
State Engineer History

- Created 1897
- “Practical” Engineer
- Governor Appointment
- Senate Confirmation
- 4 Year Term
- No Board
- No Superior Agency Review





Willard Young
1897-1898



Division of Water Rights Mission:

UTAH LAKE DRAINAGE AREA
IRRIGATION SURVEYS

O. W. ISRAELSEN
WAYNE D. CRIDDLE
ELDON M. STOCK

IRRIGATION IN UTAH

CHARLES HILLMAN BROUGH

UTAH
EMERGENCY RELIEF ADMINISTRATION

DROUGHT RELIEF
PROGRAM

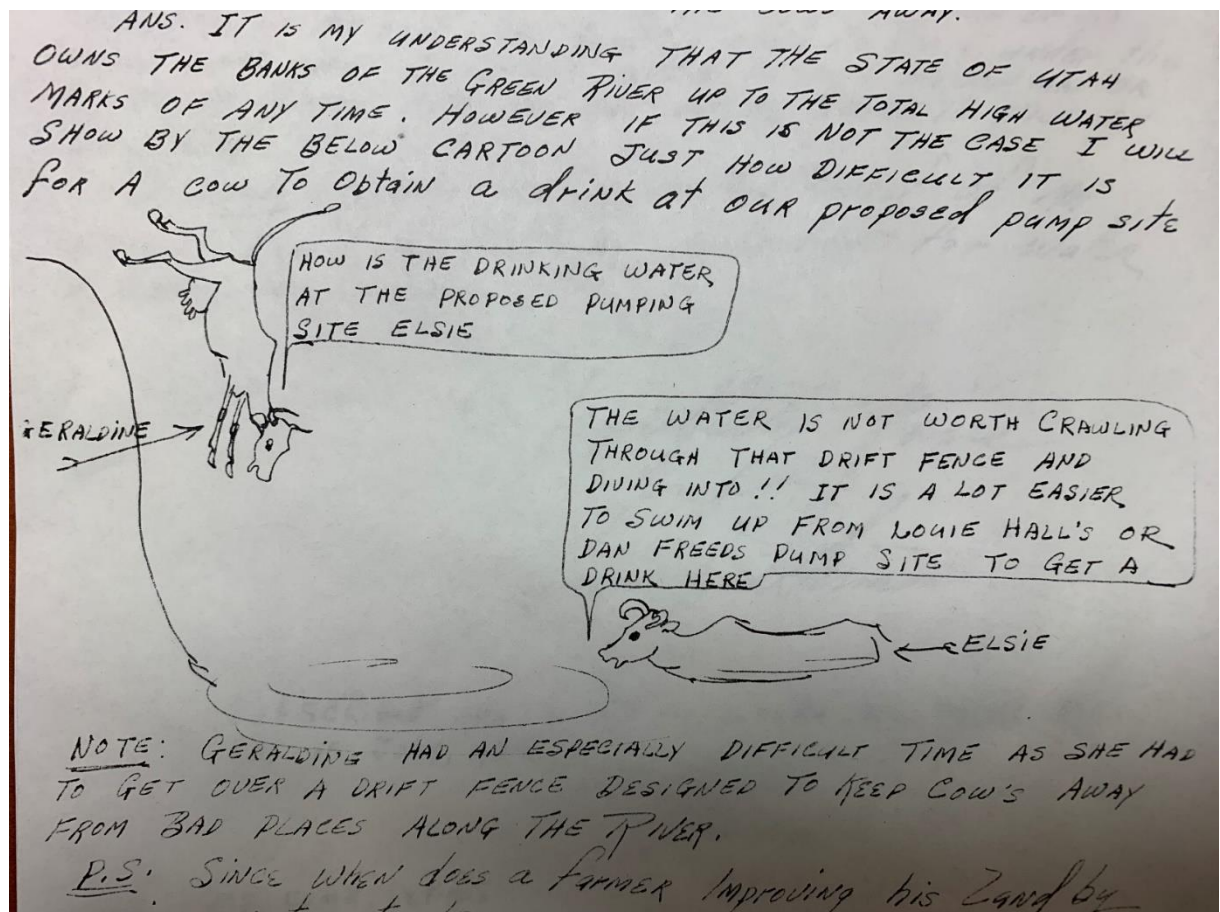
DECREE

ADJUDICATING

The
Sevier River System

HON. LE ROY H. COX

Promote order, certainty, and safety in the beneficial use of Utah's water



Current State Engineer Responsibilities

- Maintain Records and Provide Public Access
- Act on Water Right Applications
- Participate in General Adjudications
- Supervise Diversions by Priority
- Cooperative Studies
- Regulate Safety of Dams
- License Well Drillers
- Regulation of Geothermal Activities
- Approve Stream Alteration Permits
- Enforce Water Right Law



Utah Division of Water Rights



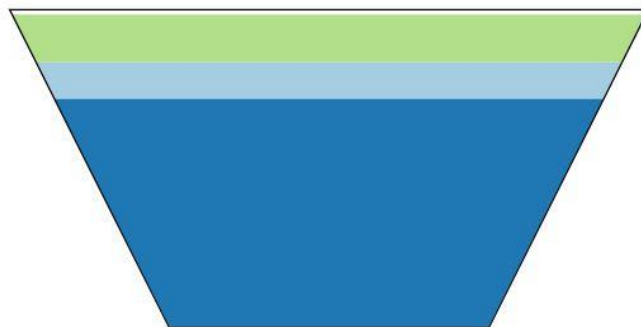
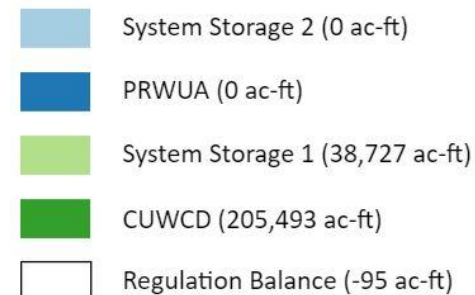
Teacups

Units: Default ▼

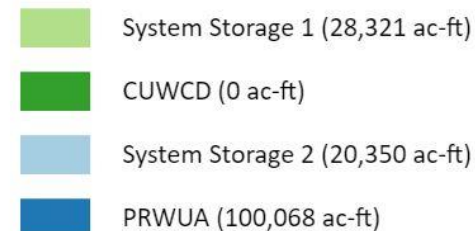
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Jordanelle Contents (244,125 ac-ft)



Deer Creek Contents (148,739 ac-ft)



Utah Division of Water Rights



Above Midway Schematic/NF

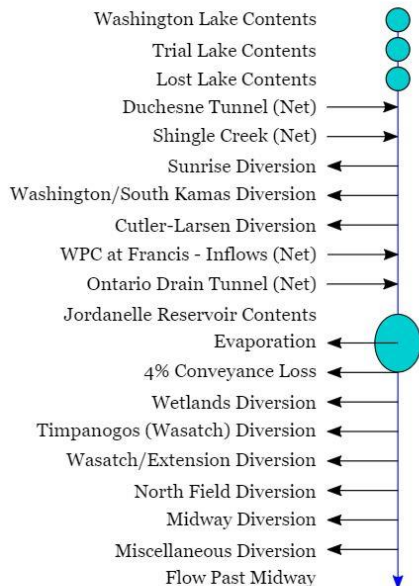
Units:

Date:



DAILY

YTD



Natural Flow =

Washington Lake Contents	21.2 cfs	686 af
Trial Lake Contents	30.8 cfs	1,037 af
Lost Lake Contents	13.1 cfs	423 af
Duchesne Tunnel (Net)	(-) 309.3 cfs	(-) 9,516 af
Shingle Creek (Net)	(-) 48.0 cfs	(-) 1,578 af
Sunrise Diversion	0.0 cfs	0 af
Washington/South Kamas Diversion	0.0 cfs	0 af
Cutler-Larsen Diversion	0.0 cfs	0 af
WPC at Francis - Inflows (Net)	(-) 572.6 cfs	(-) 28,329 af
Ontario Drain Tunnel (Net)	(-) 9.9 cfs	(-) 3,828 af
Jordanelle Reservoir Contents	1,440.4 cfs	40,706 af
Evaporation	17.2 cfs	1,994 af
4% Conveyance Loss	0.0 cfs	418 af
Wetlands Diversion	2.8 cfs	167 af
Timpanogos (Wasatch) Diversion	0.0 cfs	0 af
Wasatch/Extension Diversion	0.0 cfs	0 af
North Field Diversion	0.0 cfs	0 af
Midway Diversion	0.0 cfs	0 af
Miscellaneous Diversion	0.0 cfs	0 af
Flow Past Midway	0.0 cfs	0 af

Summary

Units:

Date:



NATURAL FLOW

	DAY	MONTH	YTD
Above Midway Bridge	856.2 cfs	17,030 af	60,782 af
Murdock Dam to Midway	491.9 cfs	11,976 af	83,215 af
Below Murdock Dam	-16.7 cfs	-651 af	-1,069 af
Conserved Released	8.3 cfs	248 af	3,695 af
Total	1,339.8 cfs	28,603 af	146,623 af

NET IMPORTS

	DAY	MONTH	YTD
WPC (PRWUA)	572.6 cfs	12,377 af	26,173 af
WPC (Echo Shares)	0.0 cfs	0 af	2,157 af
WPC (A9580)	0.0 cfs	0 af	0 af
Total WPC	572.6 cfs	12,377 af	28,329 af
Duchesne Tunnel	309.3 cfs	3,950 af	9,516 af
ODT	9.9 cfs	294 af	3,828 af
Shingle Creek	48.0 cfs	1,066 af	1,578 af
Total	939.8 cfs	17,688 af	43,251 af

TOTAL INFLOW

2,279.6 cfs	46,291 af	189,874 af
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LOSSES

	DAY	MONTH	YTD
Jordanelle Evaporation	17.2 cfs	496 af	1,994 af
Deer Creek Evaporation	19.7 cfs	588 af	2,066 af
4% Conveyance Loss	0.0 cfs	0 af	418 af
Conserved Released	8.3 cfs	248 af	3,695 af
Total	45.3 cfs	1,332 af	8,173 af

USES

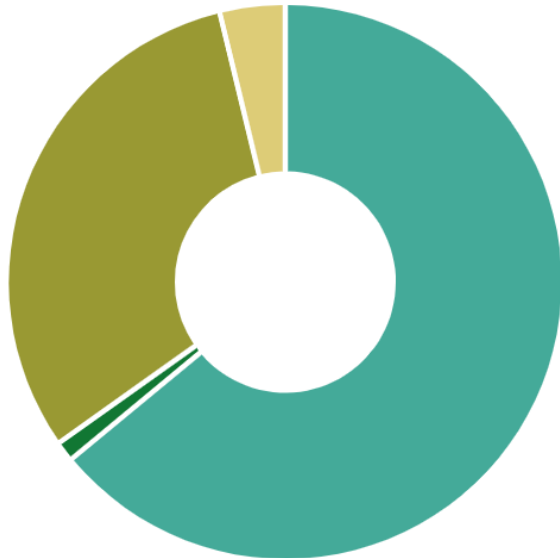
	DAY	MONTH	YTD
Diversions Above Midway	92.9 cfs	2,056 af	2,140 af
Diversions Above Murdock	418.6 cfs	6,943 af	40,249 af
Diversions Above Utah Lake	0.0 cfs	0 af	0 af
Total Diversions	511.6 cfs	8,999 af	42,389 af
Outflow to Utah Lake	388.7 cfs	11,439 af	42,948 af

TOTAL OUTFLOW

945.5 cfs	21,771 af	93,510 af
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Current Budget Breakdown

FY21-22 Sources - \$13.98M



- General Fund (\$9,008,000)
- Federal Funds (\$126,400)
- Dedicated Credits (\$4,343,400)
- Other (\$500,000)

Programs



- Adjudication (\$3,499,100)
- Administration (\$1,130,800)
- Applications and Records (\$4,717,200)
- Canal Safety (\$400)
- Dam Safety (\$1,134,400)
- Field Services (\$1,361,400)
- Technical Services (\$2,134,500)

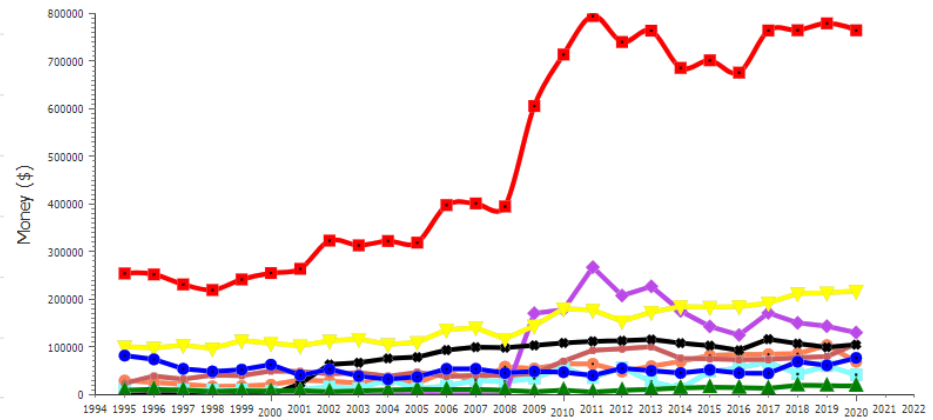
Funding History

Appropriation History by Funding Source



- General Fund
- Federal Funds
- Dedicated Credits
- Other
- Closing Nonlapsing
- Lapsing Balance
- Beginning Nonlapsing

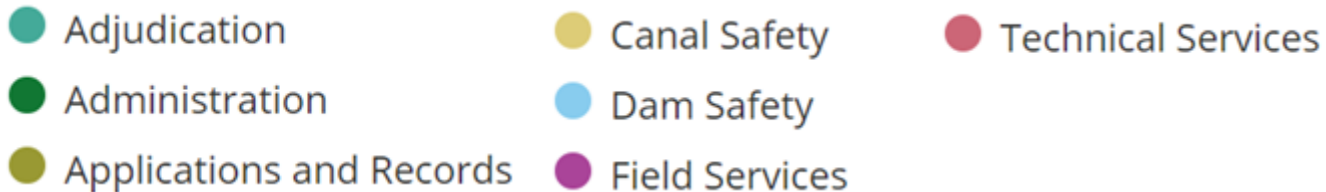
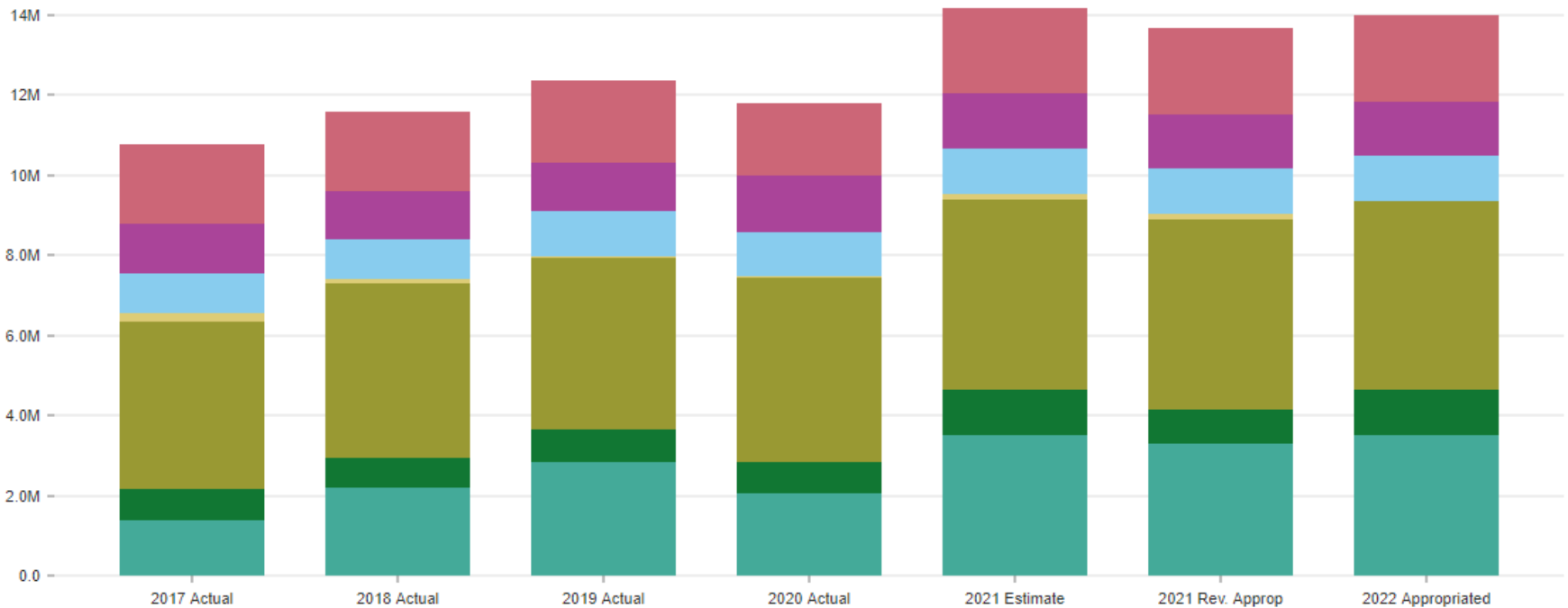
Fees



- Total
- Applications to Appropriate
- Change Applications
- Exchange Applications
- Report of Conveyance
- Extensions
- Stream Alterations
- Nonuse
- Miscellaneous

How Funding Is Being Used

Appropriation History by Program



FTEs/Special Revenue Account

Appropriated Programs

Expendable Special
Revenue Account

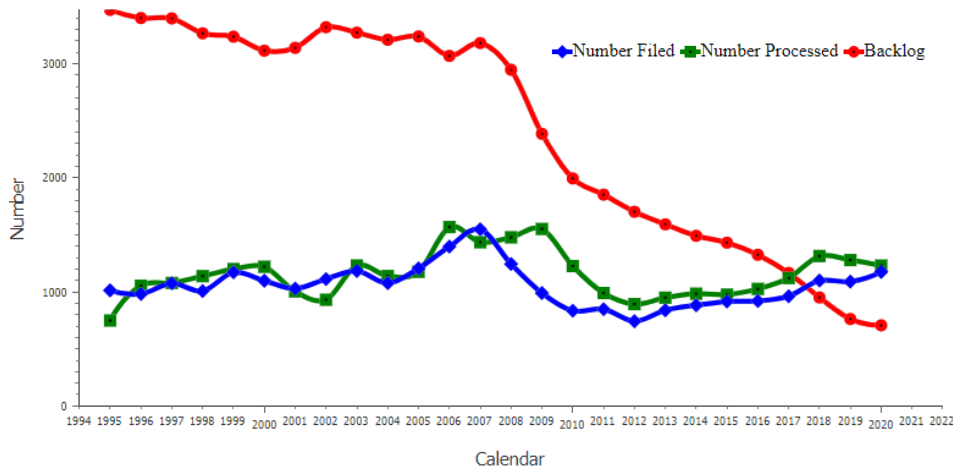
87 FTEs



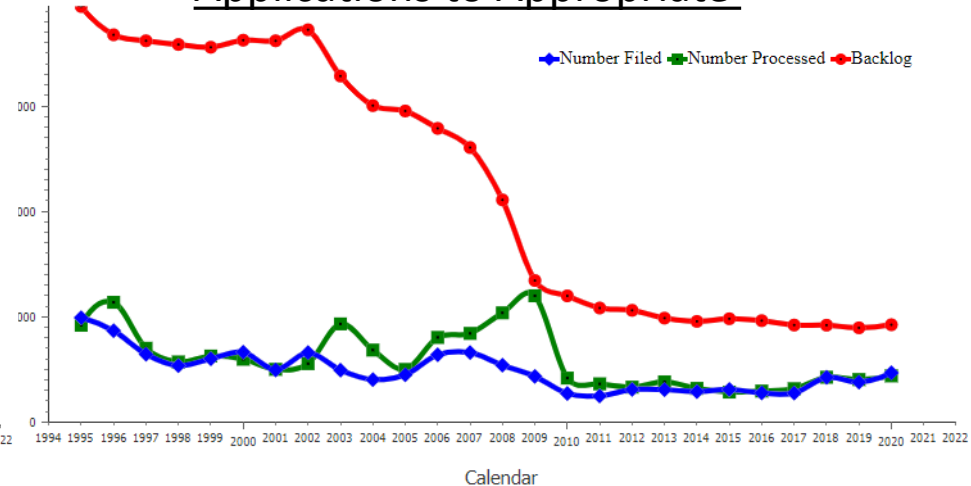
Total Commissioners 47
Collections \$1,798,227.31
Expenses \$1,748,217.84
Current Bal \$1,052,542.23

Applications, How Are We Doing?

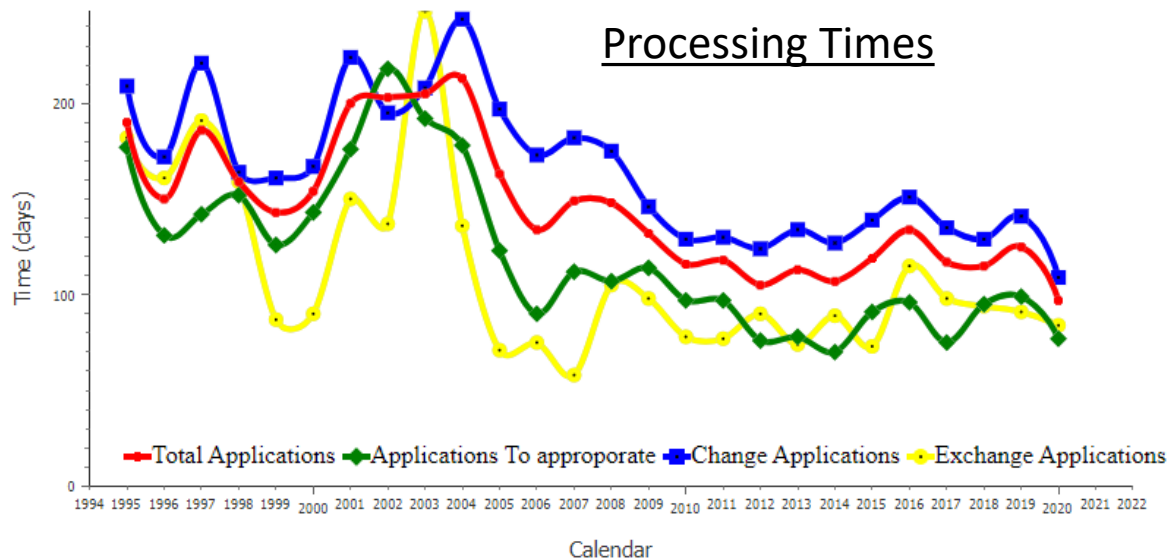
Change Applications



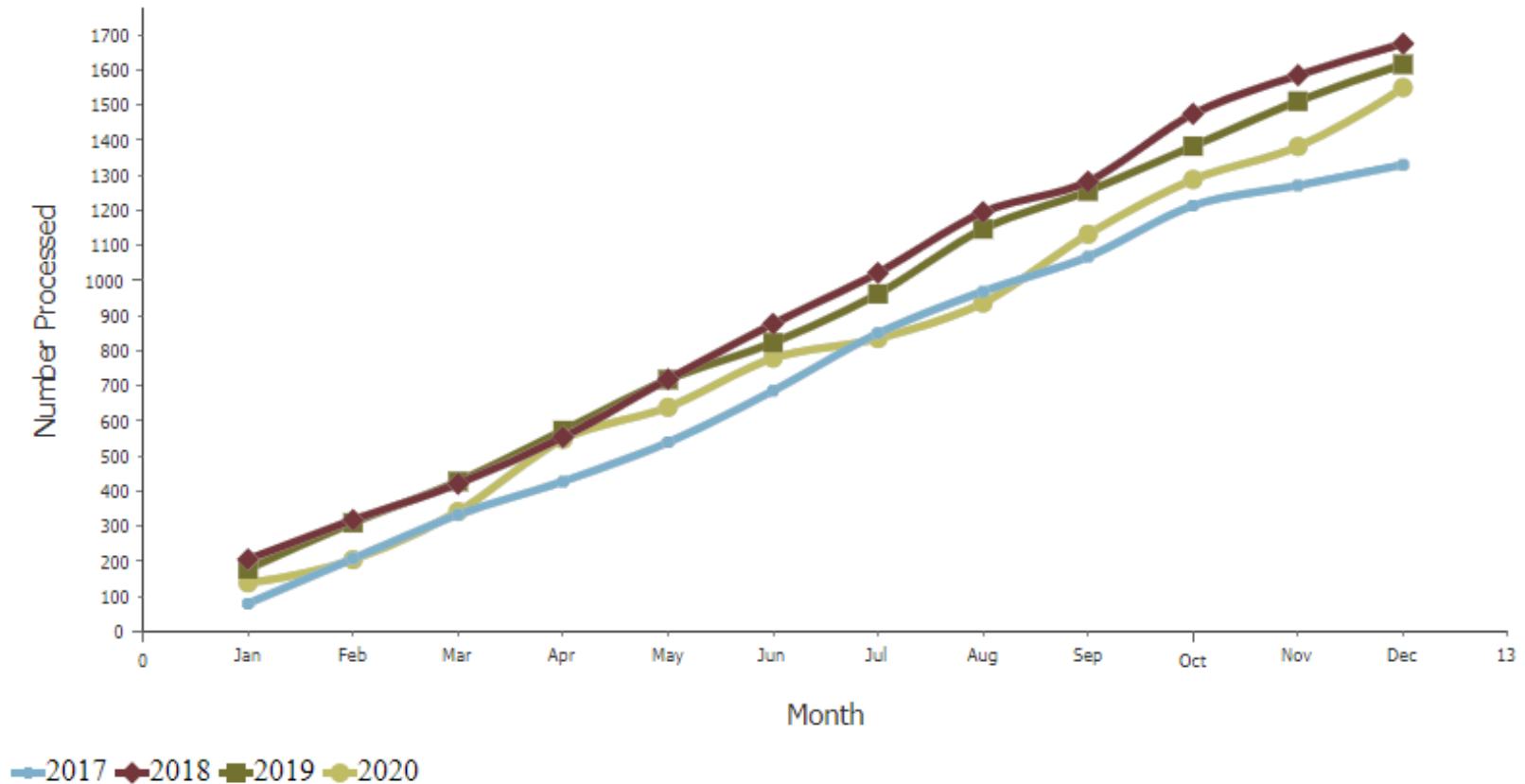
Applications to Appropriate



Processing Times

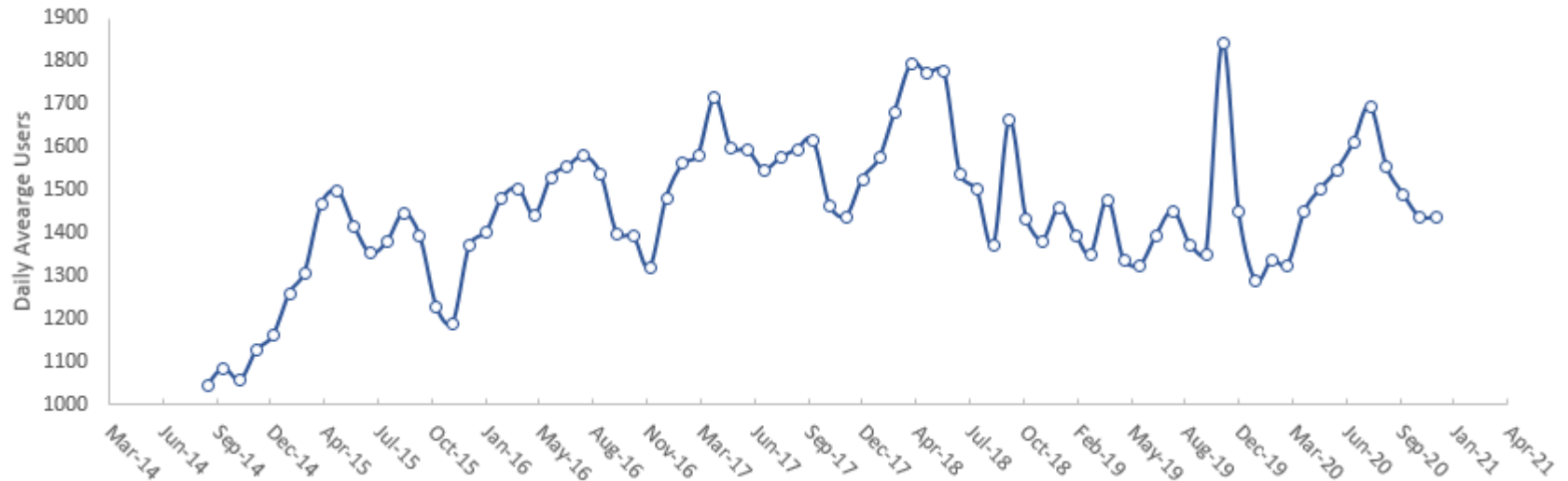


Application Processing Trends

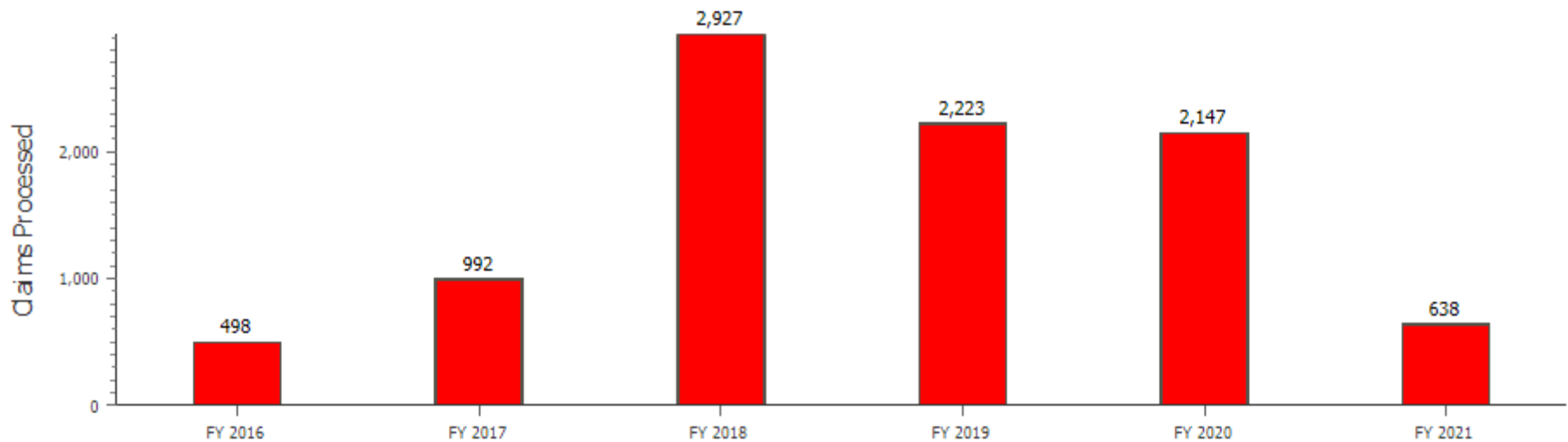


Other Indicators

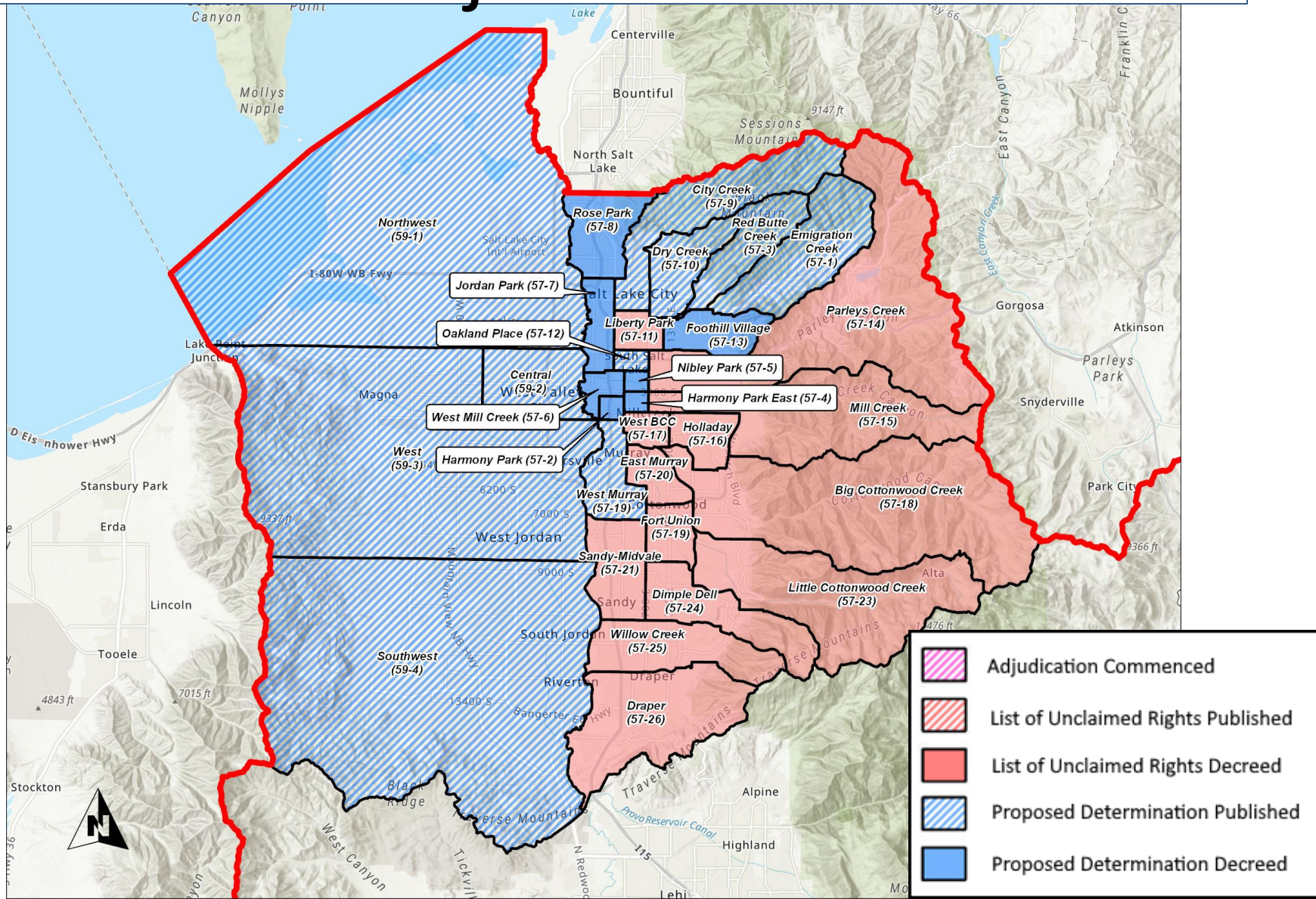
Daily Average Users by Month



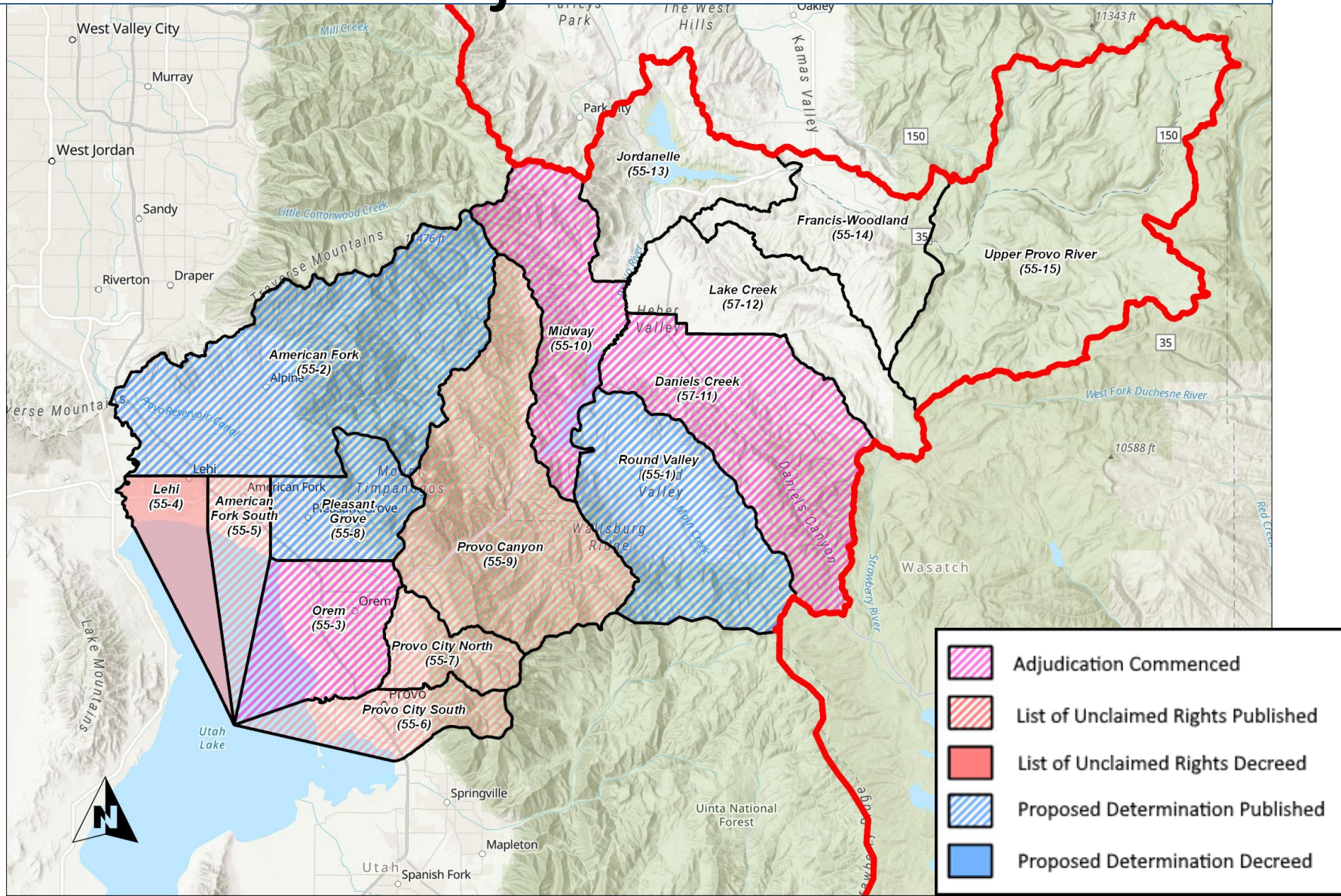
Claims Processed by Fiscal Year



Utah Lake Jordan River Adjudication



Provo River Adjudication

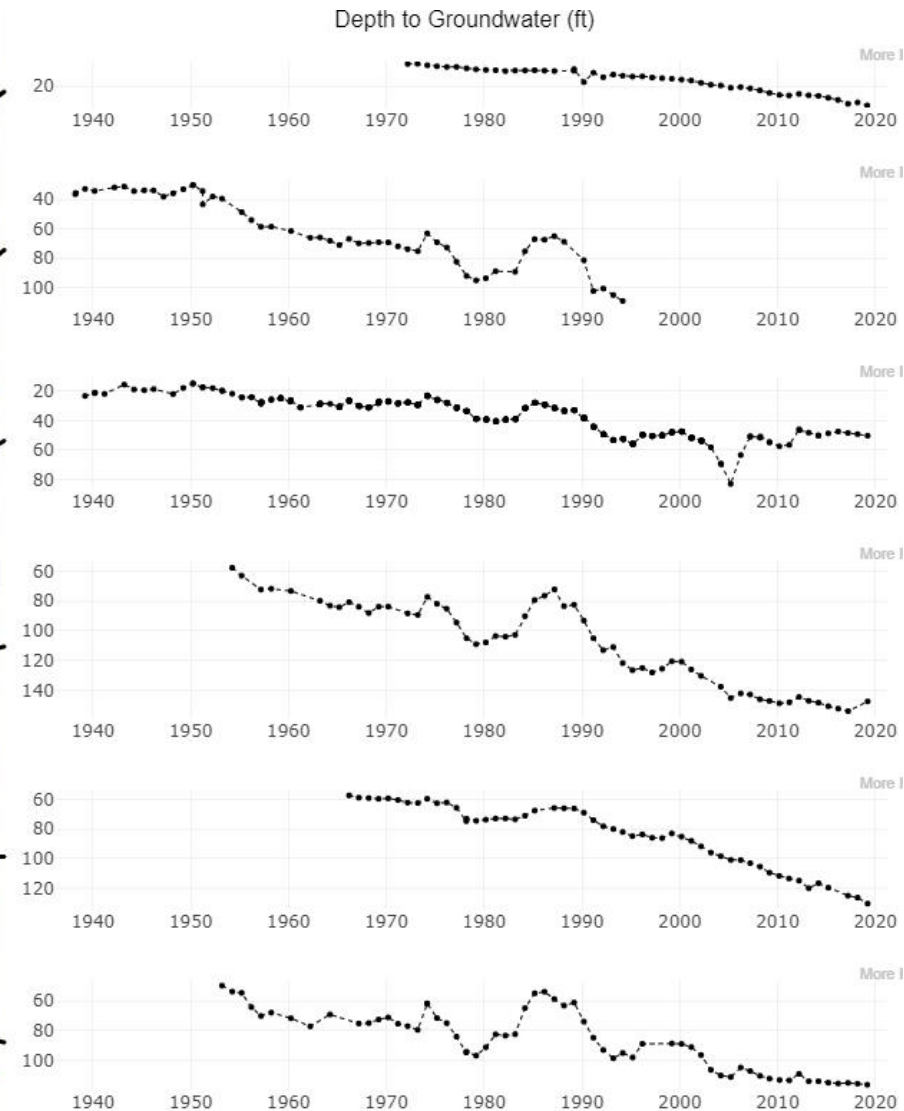
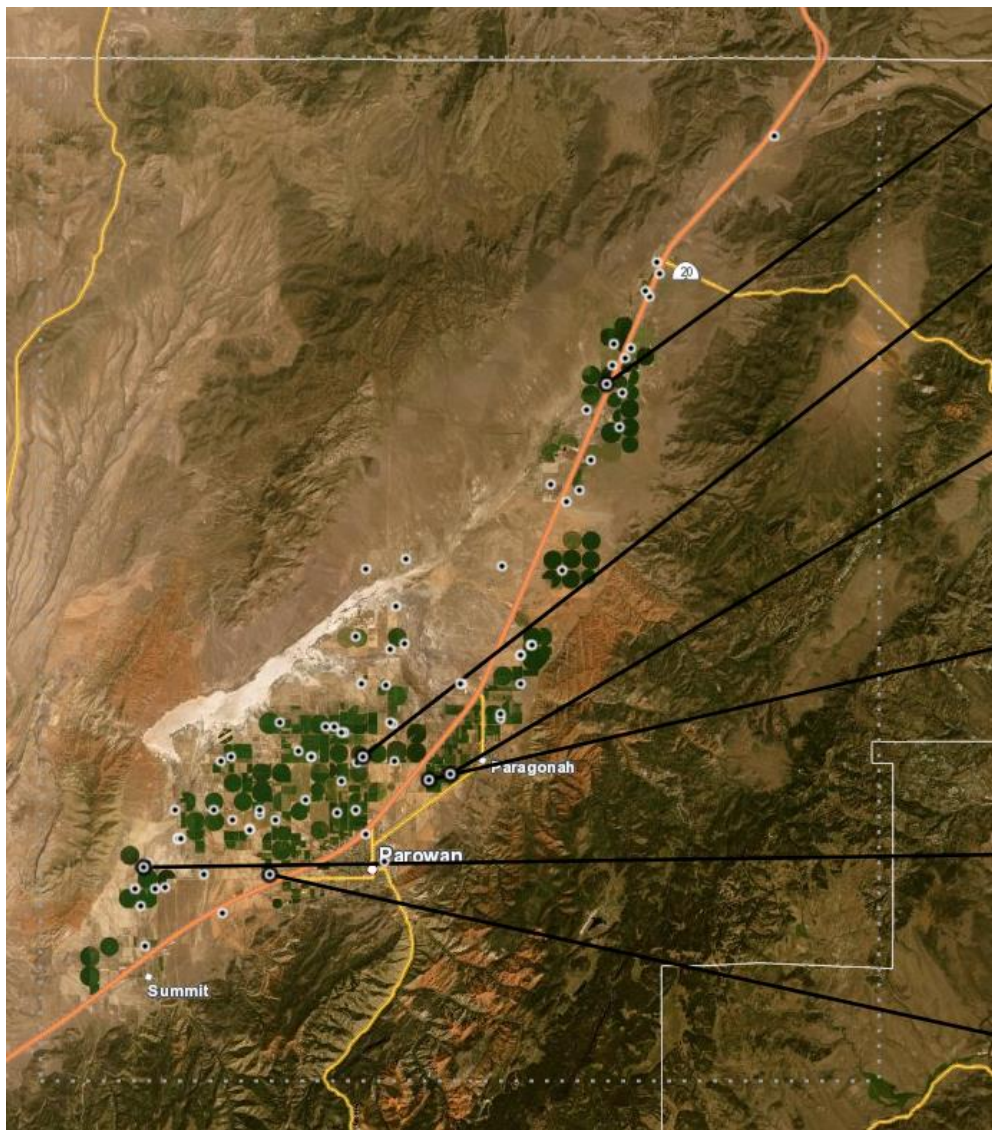


Navajo Water Rights Settlement

- Federal reserved water right
- \$8,000,000.00
- Ratify the agreement
- Interlocutory decree
- Clean water projects for Navajo Nation in Utah
- Brings clarity to the water rights based on Utah's Colorado River allocation

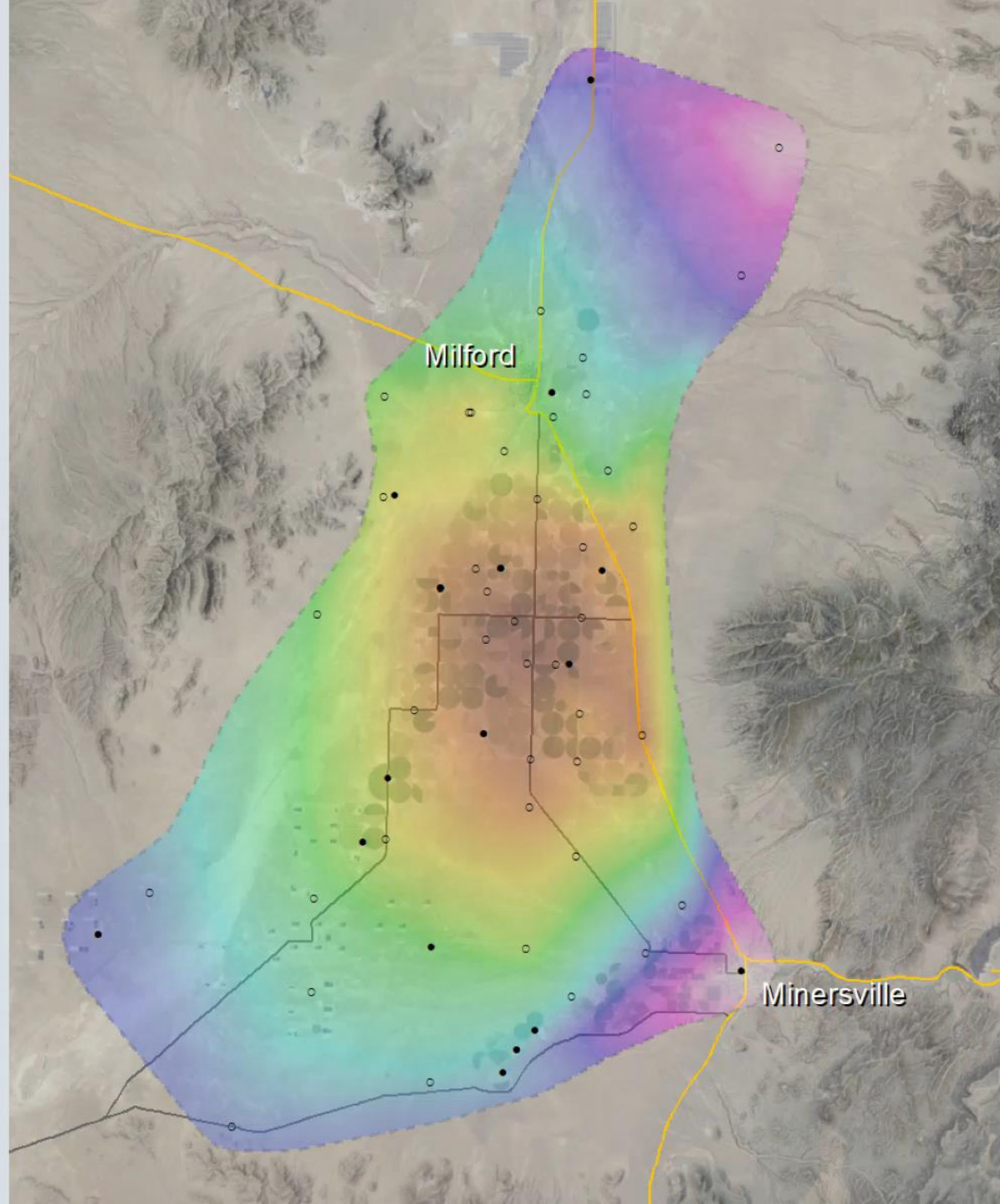
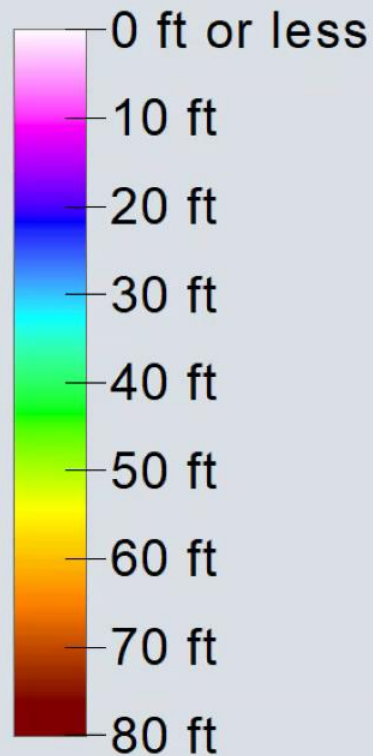


Parowan Groundwater Trends



Milford Area Groundwater Declines

From 1950 to 2019



Current Issues

- Irrigation Depletion (Change / Flexibility)
- Instream / Environmental beneficial use
- Public Welfare
- Sharing a limited resource
- Ground water management
- Conjunctive management
- Breaking down internal silos and creating efficiency



A photograph taken from inside a dark cave, looking out through a jagged rock opening. The view shows a vast, calm body of water, likely a lake, stretching towards a range of blue mountains in the distance. The sky is filled with soft, white clouds. In the foreground, the rocky interior of the cave frames the top and sides of the view. Some sparse, dry vegetation is visible on the rocky slopes leading down to the water.

QUESTIONS & THANK YOU